

Stream Engine, Water Baby and LH1000

*Development Stage:
Commercially available*



Stream Engine

Product Description

Presently we manufacture three hydroelectric generators: the Stream Engine, the Water Baby, and the LH1000. We make a machine using a four inch pitch diameter turgo runner and an adjustable permanent magnet generator. Up to four, 1 inch diameter nozzles can be used. Voltages of 12, 24, 48 and higher can be generated at most heads- from five to hundreds of feet. These are used to charge batteries and then power inverters.

We make a Water Baby which uses a hybrid runner that is 2 inches in diameter and can also use as many as four nozzles up to 1/4 inch in diameter. This can operate at heads of 20 feet to hundreds of feet, and it uses a permanent magnet generator that can be adjusted while operating. *(continued on next page)*

Product Highlights		
Standard Unit Design Capacity	2 kW	Design Working Environment <input checked="" type="checkbox"/> Natural waterways <input checked="" type="checkbox"/> Water transmission systems <input checked="" type="checkbox"/> Effluent streams <input checked="" type="checkbox"/> Tidal estuaries <input type="checkbox"/> Near shore ocean <input type="checkbox"/> Off-shore ocean <input type="checkbox"/> Deep ocean <input type="checkbox"/> Other
Other sizes currently available	Yes	
Characteristic Dimension	0.33 ft	
Rotational Axis Orientation	Vertical	

Product Description continued

The third machine we make is a 5 inch diameter propeller turbine. This machine can operate at heads of 2 to 10 feet and uses the same generator as the Stream Engine. It can produce a maximum of 1 kW at a 10 foot head.

Product Specifications/Details (Standard Stream Engine Unit)

- **Performance Specifications:**

Category	Minimum	Maximum	Units
Flow range	10	200	<i>gpm</i>
Hydraulic head range	5	400	<i>ft</i>
Power output range	0	2	<i>kW</i>
Waterway depth	-	-	<i>ft</i>
Waterway width	-	-	<i>ft</i>

- **Efficiency:** Turbine: 80% Total System: 60%
- **Deployment Locations:** Worldwide
- **Operating History:**
 - Started in 1984 selling complete machines. To date over 2,000 machines sold.
- **System Dimensions (feet):** 1 (L) × 1 (W) × 0.8 (D)
- **Unit Price (U.S. dollars):** \$1895

Company Contact Information

Company Name	Energy Systems & Design
Mailing Address	P.O. Box 4557 Sussex, NB E4E 5L7 Canada
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Company Profile

Years in Business	20-30 years
Number of Employees	less than 5 employees
Annual Equipment Sales	\$100,000 - \$1,000,000

Affiliations/Alliances/Credentials/References/Publications

- Home Power Magazine